

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Previously Presented) A cryptographic method during which an integer division of the type  $q = a \text{ div } b$  and  $r = a \text{ mod } b$  is performed in a processor of an electronic device, where  $q$  is a quotient,  $a$  is a number containing  $m$  bits,  $b$  is a number containing  $n$  bits, with  $n$  less than or equal to  $m$  and  $b_{n-1}$  is non-zero,  $b_{n-1}$  being the most significant bit of  $b$ , comprising the following steps:

(i) performing a partial division of a word  $A$ , comprising  $n$  bits of the number  $a$ , by the number  $b$  to obtain a bit of the quotient  $q$ , wherein at least one of the numbers  $a$  and  $b$  comprises secret data;

(ii) repeating step (i) for  $m-n+1$  iterations with the same number and type of operations being performed at each iteration, regardless of the value of the quotient bit obtained, to obtain the quotient  $q$ ; and

(iii) generating encrypted or decrypted data in accordance with said quotient.

2. (Previously Presented) A method according to Claim 1, wherein, at each iteration, an addition of the number  $b$  to the word  $A$  and a subtraction of the number  $b$  from the word  $A$  are performed.

3. (Canceled)

4. (Previously Presented) A method according to Claim 1 wherein, at each iteration, either the number  $b$  or a number  $\bar{b}$  complementary to the number  $b$  is added to the word  $A$ .

5. (Previously Presented) A method according to Claim 4, further including the step, at each iteration, of updating a first variable ( $\sigma'$ ) indicating whether, during the following iteration, the number  $b$  or the number  $\bar{b}$  is to be added with the word  $A$  according to the quotient bit produced.

6. (Canceled)

7. (Previously Presented) A method according to Claim 1, further including the steps, at each iteration, of performing an operation of complement to  $2^n$  of an updated data item ( $b$  or  $\bar{b}$ ) or of a notional data item ( $c$  or  $\bar{c}$ ), and adding the updated data item with the word  $A$ .

8. (Previously Presented) A method according to Claim 7, further including the step, at each iteration, of updating a second variable ( $\delta$ ), indicating whether, during the following iteration, the operation of complement to  $2^n$  is to be performed on the updated data item or on the notional data item.

9. (Previously Presented) A method according to claim 7, further including the step, at each iteration, of updating a third variable ( $\beta$ ) indicating whether the updated data item is equal to the data item  $b$  or to its complement to  $2^n$ .

10. - 11. (Canceled)

12. (Previously Presented) An electronic component comprising calculation means programmed to implement a method according to claim 1, said calculation means comprising a central unit associated with a memory comprising several registers for storing the data a and b.

13. (Previously Presented) A chip card comprising an electronic component according to Claim 12.